SAUK VILLAGE WATERWORKS DRINKING WATER QUALITY REPORT FOR 2021

Sauk Villages Water Department vigilantly safeguards its well water supply. This brochure is a summary of the Drinking water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator and field personnel, to bring you water that is safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2021

- We have one Class "A" Certified Operator / Technician who continues his education to keep up to date with the ever-changing rules and technology in the water industry, to provide the public with safe drinking water.
- We are currently training an additional Water System Technician / Operator to assist with the everincreasing workload at the Water Department.
- We operate two Sauk Village water treatment facilities, which include permanent air stripping systems and iron removal filter systems. Both sites are operational, and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves as needed continued throughout 2021.
- In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, <u>Weather/Man power permitting</u>, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water but is still mandated to be tested

2021 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology. <u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity
The "<u>Level Found</u>" column represents an <u>average</u> of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Viol atio ns | Date of Sample | Sources of Contaminant |
|---------------------------------------|------|-----|----------------|-----------------------|--------------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | N/D | 0 - 0 | N | 2021 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | N/D | 0 - 0 | N | 2021 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | N/D | 0 - 0 | N | 2021 | |
| Vinyl Chloride (ug/l) | 0 | 2 | N/D | 0-0 | N | 2021 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | N/D | 0-0 | N | 2021 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | N/D | 0-0 | N | 2021 | Discharge from industrial chemical factories |

| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Viol atio n | Date of Sample | Sources of Contaminant |
|--|----------------------|-------------|-----------------------------------|--------------------|-------------------|-------------------|---|
| Arsenic (ug/l) | 0 | 10 | 0.527 | 0.527-0.527 | N | 2021 | Erosion of natural deposits. Runoff from orchards. Runoff from glass and electronics production wastes. |
| Barium (mg/l) | 2 | 2 | 0.0663 | 0.066 - 0.066 | N | 2021 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Chromium (ug/l) | 100 | 100 | 5.41 | 5.41-5.41 | N | 2021 | Discharge from steel and pulp mills. Erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.543 | 0 exceeding AL | N | 2020 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 0 exceeding AL | N | 2020 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.79 | 0.79 – 0.79 | N | 2021 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1.0 | 0.611–0.659 | N | 2021 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 3.0 | 0.0 – 3.36 | N | 2020 | By-product of drinking water disinfection |

| Nitrate (as N) (mg/l) Nitrite (as N) (mg/l) | 10 | 10 | 0.122 | 0.0 - 0.122 | N N | 2019 | Erosion of natural deposits; run-off from fertilizer use; leaching |
|--|--------------|-------------|----------------|---------------------|-------------------|----------------|---|
| | | | | | | | from septic tanks, sewage. Discharge from |
| Selenium | 50 | 50 | 2042 | 2.42 – 2.42 | N | 2021 | petroleum and metal refineries. Erosion of natural deposits. Discharge from mines. |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 5.92 | 5.92 – 5.92 | N | 2021 | Erosion of natural deposits |
| Combined Radium (pCi/l) | 0 | 5 | 5.47 | 5.47 – 5.47 | N | 2021 | Erosion of natural deposits |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Viol atio n | Date of Sample | Sources of Contaminants |
| Manganese (ug/l) | 150 | 150 | 11 | 0 - 28 | N | 2021 | Not currently Regulated Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 209 | 209 - 209 | N | 2021 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.1 | 0.73 – 1.4 | N | 2021 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. of Positive | Violation | Source Of Contamination |
|---------------------------|------|-----|-------------------------------|-----------|--------------------------------------|
| | | | | | |
| Total Coliform | 0 | 0 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had Two Monitoring violations in 2021.

Violation Type: Monitoring – Manganese

Violation Type: Monitoring – Volatile Organic Chemicals

Our sample kits for both of these were misplaced in transit and were never received by the water department.

The water department requested new sample kits and we sampled our drinking water upon receipt of the sample kits however missing the sampling deadline. Both sample sets were tested, and the results were as expected.

Manganese tested at well below the limits set by the Illinois EPA.

Volatile Organic Chemicals tested at N/D or none detected.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by

either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

<u>Iron:</u> This contaminant is not currently regulated by the USEPA. However, the state has set a

MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a

MCL for this contaminant for supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide

information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your

physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife.
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses;
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, two possible problem sites were identified within the survey area

of well #3. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with

ongoing remediation's which may be of concern. With that, the Illinois EPA has determined that the Sauk community Water Supply's source water has a high susceptibility to contamination. This determination is based on a number of criteria including monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells. It should be noted that while the above determination was

made based on proximity and certain geologic conditions, the possibility still exists that Sauk's supply source could be impacted. Based on guidelines

outlined in the U.S. EPA's Ground Water Rule, the Illinois EPA has determined that the Sauk Community Water Supply has a low susceptibility to viral

contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the village's

wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists which prevents pathogen movement; all

potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of

disease outbreak: and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination.

Customer Views Welcome

All Village residents are encouraged to participate in the decision-making process concerning our drinking water by attending Village Board Meetings. Please contact the Village Hall for dates and times of meetings.

SAUK VILLAGE WATERWORKS DRINKING WATER QUALITY REPORT FOR 2020

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- We have two Class "A" Certified Operators who continue their education to keep them up to date
 with the ever-changing rules and technology in the water industry, to provide the public with safe
 drinking water.
- We operate two Sauk Village water treatment facilities, which include permanent air stripping systems and iron removal filter systems. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves as needed continued throughout 2020.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, **weather permitting**, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2020 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology. <u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity

The "<u>Level Found</u>" column represents an <u>average</u> of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Viol atio ns | Date of Sample | Sources of Contaminant |
|---------------------------------------|------|-----|----------------|-----------------------|--------------------|----------------|---|
| Dichloromethane (ug/l) | 0 | 5 | N/D | 0 - 0 | N | 2020 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | N/D | 0 - 0 | N | 2020 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | N/D | 0 - 0 | N | 2020 | |
| Vinyl Chloride (ug/l) | 0 | 2 | N/D | 0-0 | N | 2020 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | N/D | 0-0 | N | 2020 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | N/D | 0-0 | N | 2020 | Discharge from industrial chemical factories |

| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Viol atio n | Date of Sample | Sources of Contaminant | |
|--|----------------------|-------------|-----------------------------------|--------------------|-------------------|-------------------|---|--|
| Barium (mg/l) | 2 | 2 | 0.0415 | 0.041 - 0.041 | N | 2020 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.543 | 0 exceeding AL | N | 2020 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 0 exceeding AL | N | 2020 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.98 | 0.98 – 0.98 | N | 2020 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1.0 | 0.681 – 1.42 | N | 2020 | By-product of drinking water disinfection | |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 3.0 | 0.0 – 3.36 | N | 2020 | By-product of drinking water disinfection | |
| Nitrate (as N) (mg/l) | 10 | 10 | 0.122 | 0.0 - 0.122 | N | 2019 | Erosion of natural deposits; run-off | |
| Nitrite (as N) (mg/l) | 1 | 1 | 0.023 | 0.023 -0.023 | N | 2020 | from fertilizer use; leaching from septic tanks, sewage. | |
| Radioactive Alpha Emitters | 0 | 15 | 3.32 | 3.32 – 3.32 | N | 2018 | Erosion of natural deposits | |

| (pCi/l) Combined Radium (pCi/l) | 0 | 5 | 3.82 | 3.82 – 3.82 | N | 2018 | Erosion of natural deposits |
|------------------------------------|--------------|-------------|----------------|---------------------|-------------------|-------------------|--|
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Viol atio n | Date of Sample | Sources of Contaminants |
| Manganese (ug/l) | 150 | 150 | 411 | 411 – 411 | N | 2020 | Not currently Regulated Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 48.1 | 48.1 – 48.1 | N | 2020 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.1 | 0.6 – 1.3 | N | 2020 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. of | Violation | Source Of Contamination |
|------------------------|------|-----|-------------------|-----------|--------------------------------------|
| | | | | | |
| | | | Positive | | |
| | | | | | |
| | | | | | |
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and | | | | | |
| E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

Treatment Technique Violation (failure to meet treatment process) TTV

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had one drinking water violation in 2020.

Violation Type: (LCR) Lead Consumer Notice

We Received our result letters from the lab late thus failing to provide the results of lead tap water monitoring to the consumers at the location the water was tested. These were supposed to be provided no later than 30 days after learning the results. These letters were hand delivered to each sample location by the water department staff upon receipt from the water testing laboratory.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by

> either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

This contaminant is not currently regulated by the USEPA. However, the state has set a Iron:

MCL for this contaminant for supplies serving a population of 1000 or more.

This contaminant is not currently regulated by the USEPA. However, the state has set a Manganese:

MCL for this contaminant for supplies serving a population of 1000 or more.

There is not a state or federal MCL for sodium. Monitoring is required to provide Sodium:

> information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your

physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses;
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
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2019 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology. <u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminan ts | MCL G | MCL | Level Found | Range of Detection | Violatio ns | Date of Sample | Sources of Contaminant |
|---|----------|-----|----------------|--------------------|----------------|-------------------|---------------------------|
| Dichloromet | 0 | 5 | | | N | 2019 | Discharge from |
| hane (ug/l) | | | N/D | 0 - 0 | | | pharmaceutical and |
| | | | | | | | chemical factories. |
| Ethylbenzene | 700 | 700 | N/D | 0 - 0 | N | 2019 | Discharge from |
| (ug/l) | | | | | | | petroleum refineries |
| Toluene | 1 | 1 | N/D | 0 - 0 | N | 2019 | |
| (mg/l) | | | | | | | |
| Vinyl | 0 | 2 | N/D | 0 - 0 | N | 2019 | Leaching from PVC |
| Chloride | | | | | | | piping; Discharge |
| (ug/l) | | | | | | | from factories |

| Xylenes (mg/l) | 10 | 10 | N/D | 0 - 0 | N | 2019 | |
|---|----------------------------|----------|------------------------------------|----------------------|---------------|----------------|---|
| Cis-1,2 Dichloroethy lene (ug/l) | 70 | 70 | N/D | 0-0 | N | 2019 | Discharge from industrial chemical factories |
| Inorganic Contaminat es | MCL G | MCL | Level Found | Range of Detection | Violatio n | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | N/D | 0.0 - 0.0 | N | 2018 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Selenium (ug/l) | 50 | 50 | 2.18 | 2.18 – 2.18 | N | 2018 | Discharge from petroleum and metal refineries, Erosion of natural deposits, Discharge from mines |
| Barium (mg/l) | 2 | 2 | 0.0605 | 0.060 - 0.060 | N | 2018 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percen tile 0.516 | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percen tile | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.84 | 0.52 – 0.84 | N | 2019 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug | No goal for total | 60 | 0.705 | 0.632 – 0.705 | Z | 2019 | By-product of drinking water disinfection |
| Total Trihalometha nes (TTHM) in (ug/l) | No goal for total | 80 | 1.59 | 0.0 – 1.59 | N | 2019 | By-product of drinking water disinfection |

| Nitrate (as N) (mg/l) | 10 | 10 | 0.122 | 0.0 – 0.122 | | N | 2019 | | Erosion of natural eposits; run-off from |
|------------------------------------|--|-------------|----------------|----------------|----|-------------|----------------|----|--|
| Nitrite (as N) (mg/l) | 1 | 1 | N/D | 0.0 -0.023 | | N | 2018 | le | fertilizer use; eaching from septic tanks, sewage. |
| | | | | | | | | | |
| Radioactive Alpha Emitters | 0 | 15 | 3.32 | 3.32 – 3.32 | | N | 2018 | - | Erosion of natural deposits |
| (pCi/l) Combined Radium (pCi/l) | 0 | 5 | 3.82 | 3.82 – 3.82 | | N | 2018 | | Erosion of natural deposits |
| State Regulated Contaminants | MCL G | MCL | Level Found | 0 | | Viola on | ti Date Sam | | Sources of Contaminants |
| Manganese (ug/l) | 150 | 150 | 28.7 | 28.7 – 28.7 | | N | 20 | 18 | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 163 | 163 - 10 | 63 | N | 20 | 18 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | $\begin{array}{c} MRDL \\ G = 4 \end{array}$ | MRDL = 4 | 0.8 | 0.4 – 0.8 | | N | 2019 | | Water additive used to control microbes |

| Microbial Contaminants Source of Contamination | | MCLG MCL | | Highest No. Of Positive Violation | | | | |
|---|---|----------|---|-----------------------------------|----|--------------------------------------|--|--|
| Total Coliform | 0 | 1 | 1 | | No | Naturally present in the environment | | |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | | No | | | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2019.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

<u>Contaminants:</u> A maximum contaminant level (MCL) for this contaminant has not been established by

either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Iron: This contaminant is not currently regulated by the USEPA. However, the state has set a

MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a

MCL for this contaminant for supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide

information to consumers and health officials that are concerned about sodium intake due

to dietary precautions. If you are on a sodium-restricted diet, you should consult your

physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses;
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, two possible problem sites were identified within the survey area

of well #3. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with

ongoing remediation's which may be of concern. With that, the Illinois EPA has determined that the Sauk community Water Supply's source water has a high susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells. It should be noted that while the above determination was

made based on proximity and certain geologic conditions, the possibility still exists that Sauk's supply source could be impacted. Based on guidelines

outlined in the U.S. EPA's Ground Water Rule, the Illinois EPA has determined that the Sauk Community Water Supply has a low susceptibility to viral

contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the village's

wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists which prevents pathogen movement; all

potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of

disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination.

Customer Views Welcome

All Village residents are encouraged to participate in the decision making process concerning our drinking water by attending Village Board Meetings. Please contact the Village Hall for dates and times of meetings.

Village of Sauk Village 21801 Torrence Ave Sauk Village IL, 60411 Bulk Rate Mail U.S. Postage PAID Sauk Village, IL Permit No. #346

Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS DRINKING WATER QUALITY REPORT FOR 2018

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the Drinking water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe. Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2018

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- We operate two Sauk Village water treatment facilities, which include permanent air stripping systems and iron removal filter systems. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2018.
- In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, weather permitting, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2018 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|---------------------------------------|------|----------|-----------------------------------|-----------------------|------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | N/D | 0 - 0 | N | 2018 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | N/D | 0 - 0 | N | 2018 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | N/D | 0 - 0 | N | 2018 | |
| Vinyl Chloride (ug/l) | 0 | 2 | N/D | 0-0 | N | 2018 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | N/D | 0 – 0 | N | 2018 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | N/D | 0 – 0 | N | 2018 | Discharge from industrial chemical factories |
| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | N/D | 0.0 - 0.0 | N | 2018 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Selenium (ug/l) | 50 | 50 | 2.18 | 2.18 – 2.18 | N | 2018 | Discharge from petroleum and metal refineries, Erosion of natural deposits, Discharge from mines |
| Barium (mg/l) | 2 | 2 | 0.0605 | 0.060 - 0.060 | N | 2018 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.516 | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |

| Fluoride (mg/l) | 4.0 | 4.0 | 0.59 | 0.59 – 0.59 | N | | 2018 | | osion of natural deposits; ter additive that promotes ong teeth; discharge from fertilizer and aluminum factories. | |
|--|----------------------|----------|----------------|--------------|---|--------|-----------------|-----|--|--|
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1.87 | 0.904 – 1.87 | N | N 201 | | Ву- | product of drinking water disinfection | |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 4.41 | 0.0 – 4.41 | N | | 2018 | | product of drinking water disinfection | |
| Nitrate (as N) (mg/l) | 10 | 10 | N/D | 0.0 - 0.0 | N | | 2018 | | Erosion of natural deposits; run-off from fertilizer use; | |
| Nitrite (as N) (mg/l) | 1 | 1 | N/D | 0.0 -0.023 | N | | 2018 | | leaching from septic tanks, sewage. | |
| Radioactive Alpha Emitters (pCi/I) | 0 | 15 | 3.32 | 3.32 – 3.32 | N | | 2018 | | rosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 3.82 | 3.82 – 3.82 | N | | 2018 | Er | osion of natural deposits | |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range o | | lation | Date o Sampl | _ | Sources of Contaminants | |
| Manganese (ug/l) | 150 | 150 | 28.7 | 28.7 – 28.7 | 7 | N | 2018 | | Erosion of Naturally occurring deposits. | |
| Sodium (mg/l) | NA | NA | 163 | 163 - 16 | 3 | N | | | Erosion of naturally occurring deposits; used as water softener. | |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | .9 | 0.1 – 1.0 | | N | 12/31/20 |)18 | Water additive used to control microbes | |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|-------------------------------|------|-----|-------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2018.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Iron: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses:
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- <u>Radioactive contaminants</u>, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

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The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA.

To view a summary version of the completed Source Water Assessments, including: Importance of

Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA

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Customer Views Welcome

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Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS DRINKING WATER QUALITY REPORT FOR 2017

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the Drinking water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe. Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2017

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- We sample our raw water prior to treatment and although in the 2017 year we had a Vinyl Chloride detection in one of our wells, after treatment our water tests confirm our treatment processes are functioning as designed and producing Drinking water that meets all Illinois EPA drinking water standards.
- We operate two Sauk Village water treatment facilities, which include permanent air stripping systems and iron removal filter systems. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2017.
- In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, weather permitting, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2017 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

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<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "Date of Sample" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|--|----------------------|----------|---|-----------------------|------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | N/D | 0 - 0 | N | 2017 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | N/D | 0 - 0 | N | 2017 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | N/D | 0 - 0 | N | 2017 | |
| Vinyl Chloride (ug/l) | 0 | 2 | N/D | 0-0 | N | 2017 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | N/D | 0 – 0 | N | 2017 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | N/D | 0-0 | N | 2017 | Discharge from industrial chemical factories |
| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | 1.44 | 1.44 – 1.44 | N | 2015 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Barium (mg/l) | 2 | 2 | 0.0396 | 0.039 - 0.039 | N | 2017 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.516 | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile | 0 exceeding AL | N | 2017 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.78 | 0.78 - 0.78 | N | 2017 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1.0 | 0.0 - 1.02 | N | 2017 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 0.004 | 0.0 – 3.63 | N | 2015 | By-product of drinking water disinfection |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | 0.0 - 0.0 | N | 2017 | Erosion of natural deposits; run-off from fertilizer use; |

| Nitrite (as N) (mg/l) | 1 | 1 | 0.023 | 0.0 -0.023 |] | N | | 2017 | | aching from septic tanks, sewage. | | |
|------------------------------------|-----------|----------|----------------|--------------------|----|---------|----|----------------|---------------------------|--|----|----------------------------|
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 14.4 | | 14.4 – 14.4 | | N 2015 | | Er | osion of natural deposits | | | |
| Combined Radium (pCi/l) | 0 | 5 | 2.1 | 2.1 – 2.1 |] | N | | N 2 | | 2017 | Er | rosion of natural deposits |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detection | | Violati | on | Date of Sample | | Sources of Contaminants | | |
| Manganese (ug/l) | 150 | 150 | 17.8 | 17.8 – 17. | 8 | N | | 2017 | | Erosion of Naturally occurring deposits. | | |
| Sodium (mg/l) | NA | NA | 54.2 | 54.5 -54 | .2 | N | | 2017 | | Erosion of naturally occurring deposits; used as water softener. | | |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.0 | 0.5 – 1.2 | | N | | 12/31/20 | 17 | Water additive used to control microbes | | |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|---------------------------|------|-----|--------------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2017.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

<u>Contaminants:</u> A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Iron: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses:
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA.

To view a summary version of the completed Source Water Assessments, including: Importance of

Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA

website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, two possible problem sites were identified within the survey area of well #3. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with ongoing remediation's which may be of concern. With that, the Illinois EPA has determined that the Sauk community Water Supply's source water has a high susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells. It should be noted that while the above determination was made based on proximity and certain geologic conditions, the possibility still exists that Sauk's supply source could be impacted. Based on guidelines outlined in the U.S. EPA's Ground Water Rule, the Illinois EPA has determined that the Sauk Community Water Supply has a low susceptibility to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the village's wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination.

Customer Views Welcome

All Village residents are encouraged to participate in the decision making process concerning our drinking water by attending Village Board Meetings. Please contact the Village Hall for dates and times of meetings.

Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS DRINKING WATER QUALITY REPORT FOR 2016

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the Drinking water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe. Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2016

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Our rehabilitation project of both Sauk Village water treatment facilities, which includes permanent air stripping systems and iron removal filter systems has been completed. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2016.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, weather permitting, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2016 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

 \underline{AL} = Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|--|----------------------|----------|-----------------------------------|-----------------------|------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | N/D | 0 - 0 | N | 2016 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | N/D | 0 - 0 | N | 2016 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | N/D | 0 - 0 | N | 2016 | |
| Vinyl Chloride (ug/l) | 0 | 2 | N/D | 0 – 0 | N | 2016 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | N/D | 0-0 | N | 2016 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | N/D | 0 – 0 | N | 2016 | Discharge from industrial chemical factories |
| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | 1.44 | 1.44 – 1.44 | N | 2015 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Barium (mg/l) | 2 | 2 | 0.062 | 0.062 -0.062 | N | 2015 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.561 | 0 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 1 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.86 | 0.86 – 0.86 | N | 2015 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1.0 | 0.0 – 1.21 | N | 2016 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 0.004 | 0.0 – 3.63 | N | 2015 | By-product of drinking water disinfection |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | 0.0 – 0.0 | N | 2016 | Erosion of natural deposits; run-off from fertilizer use; |

| Nitrite (as N) (mg/l) | 1 | 1 | .01 | 0.001 | | N | 2016 | | leaching from septic sewage. | |
|------------------------------------|-----------|----------|----------------|--------------------|----|---------|------|----------------|---------------------------------|--|
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 14.4 | 14.4 – 14.4 | : | N | 2015 | | Er | osion of natural deposits |
| Combined Radium (pCi/l) | 0 | 5 | 1.7 | 1.7 – 1.7 | | N | | 2015 | Er | rosion of natural deposits |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detection | | Violati | on | Date of Sample | | Sources of Contaminants |
| Manganese (ug/l) | 150 | 150 | 32.3 | 32.3 - 32 | .3 | N | | 2015 | | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 155 | 155 -15. | 5 | N | | 2015 | | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.1 | 0.95 – 1.2 | | N | | 12/31/20 | 16 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|---------------------------|------|-----|--------------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2016.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

<u>Contaminants:</u> A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

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Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

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- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems:
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

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Customer Views Welcome

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Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2015

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On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2015

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- Our rehabilitation project of both Sauk Village water treatment facilities, which includes permanent air stripping systems and iron removal filter systems has been completed. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2015.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants, weather permitting, to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2015 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

 \underline{AL} = Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|--|----------------------|----------|---|-----------------------|------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | 0.1 | 0 - 0 | N | 2015 | Discharge from pharmaceutical and chemical factories. |
| Ethylbenzene (ug/l) | 700 | 700 | 12.9 | 0 -12.9 | N | 2015 | Discharge from petroleum refineries |
| Toluene (mg/l) | 1 | 1 | 0.001 | 0 - 0.00705 | N | 2015 | |
| Vinyl Chloride (ug/l) | 0 | 2 | 2 | 0 - 4.67 | N | 2015 | Leaching from PVC piping; Discharge from factories |
| Xylenes (mg/l) | 10 | 10 | 0.003 | 0 – 0.0321 | N | 2015 | |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | 0.97 | 0 – 0.97 | N | 2015 | Discharge from industrial chemical factories |
| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | 1.44 | 1.44 – 1.44 | N | 2015 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Barium (mg/l) | 2 | 2 | 0.062 | 0.062 -0.062 | N | 2015 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.561 | 0 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 1 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 0.86 | 0.86 – 0.86 | N | 2015 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 0.006 | 0.0 - 5.68 | N | 2015 | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) in (ug/l) | No goal for total | 80 | 0.004 | 0.0 – 3.63 | N | 2015 | By-product of drinking water disinfection |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | 0.0 - 0.0 | N | 2015 | Erosion of natural deposits; run-off from fertilizer use; |

| Nitrite (as N) (mg/l) | 1 | 1 | .016 | .016016 | | N | | 2015 | le | aching from septic tanks, sewage. |
|------------------------------------|-----------|----------|----------------|--------------------|----|---------|----|----------------|----|--|
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 14.4 | 14.4 – 14.4 | | N | | 2015 | | rosion of natural deposits |
| Combined Radium (pCi/l) | 0 | 5 | 1.7 | 1.7 – 1.7 | | N | | 2015 | Er | rosion of natural deposits |
| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detection | | Violati | on | Date of Sample | | Sources of Contaminants |
| Manganese (ug/l) | 150 | 150 | 32.3 | 32.3 - 32 | .3 | N | | 2015 | | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 155 | 155 -15: | 5 | N | | 2015 | | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.2 | 0.95 – 1.4 | | N | | 12/31/20 | 15 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|-------------------------------|------|-----|--------------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV
Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2015.

We are currently in compliance with the drinking water standard set by the IEPA.

We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

Unregulated

Iron:

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses:
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA.

To view a summary version of the completed Source Water Assessments, including: Importance of

Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA

website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, two possible problem sites were identified within the survey area of well #3. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with ongoing remediation's which may be of concern. With that, the Illinois EPA has determined that the Sauk community Water Supply's source water has a high susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells. It should be noted that while the above determination was made based on proximity and certain geologic conditions, the possibility still exists that Sauk's supply source could be impacted. Based on guidelines outlined in the U.S. EPA's Ground Water Rule, the Illinois EPA has determined that the Sauk Community Water Supply has a low susceptibility to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the village's wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination.

Customer Views Welcome

All Village residents are encouraged to participate in the decision making process concerning our drinking water by attending Village Board Meetings. Please contact the Village Hall for dates and times of meetings.

If you are interested in learning more about the Treatment and Distribution of the water system, or have any questions or concerns about this report, contact the Village Hall at 708.758.3330.

Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2014

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2014

- o We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Our rehabilitation project of both Sauk Village water treatment facilities, which includes permanent air stripping systems and iron removal filter systems is nearly complete. Both sites are operational and pumping treated finished water to our system that tests ND, not detected, for Vinyl Chloride.
- With the addition of the air stripping and filter systems our water quality has improved and greatly reduced our customer complaints for rusty water and taste and odor issues.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2014.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2014 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "Date of Sample" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Volatile Organic Contaminants | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|--|----------------------|----------|---|-----------------------|------------|-------------------|---|
| Dichloromethane (ug/l) | 0 | 5 | 0.1 | 0 -1.09 | N | 2014 | Discharge from pharmaceutical and chemical factories. |
| Vinyl Chloride (ug/l) | 0 | 2 | 2 | 0 -8.69 | N | 2014 | Leaching from PVC piping; Discharge from factories |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | 2.26 | 0 – 2.26 | N | 2014 | Discharge from industrial chemical factories |
| Inorganic Contaminates | MCLG | MCL | Level Found | Range of Detection | Violation | Date of Sample | Sources of Contaminant |
| Arsenic (ug/l) | 0 | 10 | 0.675 | 0.675-0.675 | N | 2014 | Erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production waste. |
| Barium (mg/l) | 2 | 2 | 0.0529 | 0.0529 - 0.0529 | N | 2014 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.561 | 0 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 0 | 1 exceeding AL | N | 2014 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4.0 | 4.0 | 1.13 | 1.13 – 1.13 | N | 2014 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5)in(ug/l) | No goal for total | 60 | 1 | 0.0-1.13 | N | 2014 | By-product of drinking water disinfection |
| Nitrate (as N) (mg/l) | 10 | 10 | .0695 | .05240695 | N | 2014 | Erosion of natural deposits; run-off from fertilizer use; |
| Nitrite (as N) (mg/l) | 10 | 10 | .0171 | .0170171 | N | 2014 | leaching from septic tanks, sewage. |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 6.2 | 6.2 – 6.2 | N | 2014 | Erosion of natural deposits |
| Combined Radium (pCi/l) | 0 | 5 | 3.4 | 3.4 – 3.4 | N | 2014 | Erosion of natural deposits |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation s | Date of Sample | Sources of Contaminants |
|---------------------------------|-----------|----------|----------------|---------------------|----------------|-------------------|--|
| Iron (mg/l) | NA | 1.0 | 0.734 | 0.734 - 0.734 | N | 2014 | Erosion from Naturally occurring deposits. |
| Manganese (ug/l) | 150 | 150 | 27.3 | 27.3 - 27.3 | N | 2014 | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 130 | 130 -130 | N | 2014 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.4 | 1.08 – 1.6 | N | 12/31/2014 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|------------------------------|------|-----|-------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2014.

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We are still participating in an accelerated monitoring schedule with the IEPA. We test monthly, all raw and finished water Produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

Water Quality Data Table Footnotes

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In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

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The Source Water Assessment for Sauk Village (facility # 0312790)

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Customer Views Welcome

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Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2013

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2013

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- o We continue to operate temporary Air Stripping equipment at our facility to deal with the Vinyl Chloride that has become present, at levels below the MCL set by the state EPA, in our raw water supply. Our finished water now tests as ND, not detected, after the treatment processes in place.
- With the approval of an ILEPA loan, Rehabilitation of both Sauk Village water treatment facilities is scheduled to begin early 2014.
 - This project will include new permanent air stripping systems and all new Iron removal filter systems at both water treatment facilities here in Sauk Village.
- o We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2013.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase
 the quality of the water throughout that area.
- Our personnel have repaired, replaced, and installed new main valves in key locations to help us with maintenance and future expansion of our system.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2013 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant |
|--|------|----------|--|--------------------|------------|-------------------------------|---|
| Volatile Organic Contaminants | | | | | | • | |
| Vinyl Chloride (ug/l) | 0 | 2 | 1 | 0 -9.97 | N | 2013 | Leaching from PVC piping; Discharge from factories |
| Cis-1,2 Dichloroethylene (ug/l) | 70 | 70 | 3.88 | 0 – 3.88 | N | 2013 | Discharge from industrial chemical factories |
| Barium (mg/l) | 2 | 2 | 0.054 | 0.054 - 0.054 | N | 10/18/2011 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.84 | 0 exceeding AL | N | 07/12/2011 - 09/20/2011 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 8.18 | 1 exceeding AL | N | 07/12/2011 - 09/20/2011 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Fluoride (mg/l) | 4 | 4 | 1.02 | 1.02 – 1.02 | N | 10/18/2011 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | N | 08/09/2011 | Erosion of natural deposits; run-off from fertilizer use; |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | N | 08/10/2011 | leaching from septic tanks, sewage. |
| Total Trihalomethanes TTHMs (ug/l) | NA | 80 | ND | NA | N | 07/19/2011 | |
| Total Haloacetic Acids HAA5 (ug/l) | NA | 60 | 1.43 | 0 – 1.43 | N | 2013 | By-product of drinking water chlorination. |
| Radioactive Alpha Emitters | 0 | 15 | 3.5 | 2.4 – 3.5 | N | 07/08/2008 | Erosion of natural deposits |

| (pCi/l) Combined Radium (pCi/l) | 0 | 5 | 2.52 | 2.52 – 2.52 | | N | 08 | 08/09/2011 | | osion of natural deposits |
|---------------------------------|-----------|----------|----------------|-------------|----|--------------|-----|------------|----|--|
| State Regulated Contaminants | MCLG | MCL | Level Found | Range o | | Violati s | ion | Date of | | Sources of Contaminants |
| Iron (ug/l) | NA | 1000 | 0.111 | 0.111 - 0.1 | 11 | N | | 10/18/20 | 11 | Erosion from Naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 25.6 | 25.6 - 25 | .6 | N | | 10/18/20 | 11 | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 122 | 122 -12 | 2 | N | | 10/18/20 | 11 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 1.3 | 0.1 – 1.5 | | N | | 12/31/20 | 13 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|------------------------------|------|-----|-------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV
Treatment Technique Violation (failure to meet treatment process)
Reporting Violation (failure to submit results/required report by deadline)

Violations for Sauk Village Public Water Supply IL0312790

Violations Table: We had NO drinking water violations in 2013.

We are currently in compliance with the drinking water standard set by the IEPA.

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Water Quality Data Table Footnotes

Unregulated

<u>Contaminants:</u> A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

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Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses:
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The Source Water Assessment for Sauk Village (facility # 0312790)

The source water assessment for our supply has been completed by the Illinois EPA.

To view a summary version of the completed Source Water Assessments, including: Importance of

Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA

website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Based on information obtained in a Well Site Survey, published in 1992 by the Illinois EPA, two possible problem sites were identified within the survey area of well #3. Furthermore, information provided by the Leaking Underground Storage Tank Section of the Illinois EPA indicated several additional sites with ongoing remediation's which may be of concern. With that, the Illinois EPA has determined that the Sauk community Water Supply's source water has a high susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data on the wells. It should be noted that while the above determination was made based on proximity and certain geologic conditions, the possibility still exists that Sauk's supply source could be impacted. Based on guidelines outlined in the U.S. EPA's Ground Water Rule, the Illinois EPA has determined that the Sauk Community Water Supply has a low susceptibility to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the village's wells are properly constructed with sound integrity and proper site conditions; a hydro geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the village's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination.

Customer Views Welcome

All Village residents are encouraged to participate in the decision making process concerning our drinking water by attending Village Board Meetings. Please contact the Village Hall for dates and times of meetings.

If you are interested in learning more about the Treatment and Distribution of the water system, or have any questions or concerns about this report, contact the Village Hall at 708.758.3330.

Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2012

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2012

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Air Stripping equipment has been installed at our facility to deal with the Vinyl Chloride that has become present, at levels below the MCL set by the state EPA, in our raw water supply. Our finished water now tests as ND, not detected, after the treatment processes in place.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2012.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase
 the quality of the water throughout that area.
- Our personnel have repaired, replaced, and installed new main valves in key locations to help us with maintenance and future expansion of our system.
- o We have replaced some short run sections of water main to better serve our community.
- o In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone

and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2012 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

 \underline{MCL} = Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the \underline{MCLG} as feasible using the best available treatment technology.

<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant | |
|--|------|-------------------|--|-----------------------|------------|-------------------------------|---|--|
| Inorganic | | * Action Level | | | | • | | |
| Barium (mg/l) | 2 | 2 | 0.054 | 0.054 - 0.054 | N | 10/18/2011 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 90 th percentile 0.84 | 0 exceeding AL | N | 07/12/2011 - 09/20/2011 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 90 th percentile 8.18 | 1 exceeding AL | N | 07/12/2011 - 09/20/2011 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4 | 4 | 1.02 | 1.02 – 1.02 | N | 10/18/2011 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | N | 08/09/2011 | Erosion of natural deposits; run-off from | |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | N | 08/10/2011 | fertilizer use; leaching from septic tanks, sewage. | |
| Total Trihalomethan es | NA | 80 | ND | NA | N | 07/19/2011 | By-product of drinking | |
| TTHMs (ug/l) Total Haloacetic Acids HAA5 (ug/l) | NA | 60 | 18.3 | NA | N | 07/16/2011 | water chlorination. | |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 3.5 | 2.4 – 3.5 | N | 07/08/2008 | Erosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 2.52 | 2.52 – 2.52 | N | 08/09/2011 | Erosion of natural deposits | |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation s | Date of Sample | Sources of Contaminants |
|---------------------------------|-----------|----------|----------------|---------------------|----------------|-------------------|--|
| Iron (ug/l) | NA | 1000 | 0.111 | 0.111 - 0.111 | N | 10/18/2011 | Erosion from Naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 25.6 | 25.6 - 25.6 | N | 10/18/2011 | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 122 | 122 -122 | N | 10/18/2011 | Erosion of naturally occurring deposits; used as water softener. |
| Chlorine (mg/l) | MRDLG = 4 | MRDL = 4 | 0.1 | 0.097 - 0.2 | N | 12/31/2012 | Water additive used to control microbes |

| Microbial Contaminants | MCLG | MCL | Highest No. Of Positive | Violation | Source of Contamination |
|------------------------------|------|-----|-------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 1 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by dead line)

Violations for Sauk Village Public Water Supply

Violations Table: We had one drinking water violation in 2012, it was a monitoring violation. During the transition from quarterly VOC sampling to monthly VOC sampling, a sample was not taken in September of 2012. Upon notification VOC samples were immediately collected in October of 2012. Those samples resulted in ND "not detected" in all finished water samples.

We are currently in compliance with the drinking water standard set by the IEPA.

<u>Detections</u>: In 2012 we again had VOC detections below the MCL set by the IEPA of cis-1,2 Dichloroethylene and Vinyl Chloride. We are still participating in an accelerated monitoring schedule with the IEPA. We test monthly, all raw and finished water produced. We are diligently working with the IEPA to ensure we meet all drinking water standards.

In addition to the accelerated monitoring schedule, The Water Department is working with the Village Engineers, the IEPA, and the Village administration actively and aggressively seeking options for additional treatment and/or sources of water.

Water Quality Data Table Footnotes

<u>Unregulated</u>

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

<u>Iron:</u> This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater

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Postal Customer Sauk Village, IL 60411

SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2009

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On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2009

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- We continue to upgrade of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- Replacement and repair of residential shut off valves continued throughout 2009.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase
 the quality of the water throughout that area.
- Our personnel have repaired, replaced, and installed new main valves in key locations to help us with maintenance and future expansion of our system.
- o We have replaced some short run sections of water main to better serve our community.
- In addition to weekly flushing of key areas we also continue the flushing and maintenance of our fire hydrants to provide a reliable system for the Fire Department in the event of an emergency.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2009 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

MCLG = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL= Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 \underline{ND} = not detectable at testing limits, \underline{NA} = not applicable, $\underline{mg/l}$ = milligrams per liter, or \underline{p} arts \underline{p} er \underline{m} illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "<u>Level Found</u>" column represents an <u>average</u> of sample result data collected. The "<u>Range of Detections</u>" column represents a range of <u>individual</u> sample results.

The "Date of Sample" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant | |
|--|------|-------------------|----------------|--------------------|------------|----------------|---|--|
| Inorganic | | * Action Level | | | | | | |
| Barium (mg/l) | 2 | 2 | 0.0553 | 0.0514 - 0.0553 | N | 10/24/2008 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 0.654 | 0 exceeding AL | N | 09/04/2008 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 15.5 | 1 exceeding AL | Y | 09/04/2008 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4 | 4 | 1.19 | 0.99 – 1.19 | N | 10/24/2008 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | N | 07/08/2008 | Erosion of natural deposits; run-off from | |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | N | 07/08/2008 | fertilizer use; leaching from septic tanks, sewage. | |
| Selenium (ug/l) | 50 | 50 | ND | NA | N | 10/24/2008 | Discharge from petroleum and metal refineries; erosion of natural deposits. | |
| Total Trihalomethan es | NA | 80 | ND | NA | N | 07/22/2008 | D. J. Clili | |
| TTHMs (ug/l) Total Haloacetic Acids HAAS (ug/l) | NA | 60 | 1.49 | NA | N | 07/22/2008 | By-product of drinking water chlorination. | |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 3.5 | 2.4 – 3.5 | N | 07/08/2008 | Erosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 3.5 | 3.1 – 3.5 | N | 07/08/2008 | Erosion of natural deposits | |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violation s | Date of Sample | Sources of Contaminants |
|---------------------------------|------|------|----------------|------------------------|----------------|-------------------|--|
| Iron (ug/l) | NA | 1000 | 141 | NA | N | 10/24/2008 | Erosion from Naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 42.0 | 31.1 – 42.0 | N | 10/24/2008 | Erosion of Naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 113 | 71.1 - 113 | N | 10/24/2008 | Erosion of naturally occurring deposits; used as water softener. |

| Microbial Contaminants | MCLG | MCL Hi | ghest No. Of Positive Violat | tion So | ource of Contamination |
|-------------------------------|------|--------|------------------------------|---------|--------------------------------------|
| Total Coliform | 0 | 1 | 2 | Y | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)
TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by dead line)

Violations for Sauk Village Public Water Supply

Violations Table

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type Violation Begin Violation End Violation Explanation

MCL (TCR), MONTHLY 05/01/2009 - 05/31/2009 Total Coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.

<u>Coliform bacteria is in itself NOT a health risk. It is an indicator that other bacteria may be present and additional testing may be required.</u>

The EPA standard states that we are allowed one positive coliform sample per month, we had two positives in May 2009.

These positive samples were both isolated to the same sample tap and not the water system as a whole. The sample tap was flushed and subsequent samples were negative for the coliform bacteria.

<u>Violation</u>: Public notice rule linked to violation from 11/1/2008 - 11/30/2008. Due to a printing and distribution error we did not notify the public within the time allotted by the IEPA resulting in a public notice violation 1/16/2009 - 2/5/2009.

<u>Violation</u>: In 2009 Well #3 site at 2050 Evergreen is in violation for Vinyl Chloride in excess of the IEPA MCL for drinking water. This well is not a primary source of water for the Village and is not pumping to the system. It remains on a quarterly sampling schedule at this time for monitoring purposes only.

<u>Detections</u>: In 2009 we had detections of cis-1,2 Dichloroethylene and Vinyl Chloride at which point we were placed on an accelerated monitoring schedule by the IEPA. We are diligently working with the IEPA to ensure we meet all drinking water standards.

On March 20, 2009 the IEPA conducted a site inspection at our facility with the following violations:

Failure to have cross-connection control program - Resolved

 $Failure \ to \ provide \ a \ gas \ chlorine \ room \ meeting \ all \ applicable \ design \ requirements - \underline{Resolved}$

Failure to provide a method to drain stagnant water from the well house for well #3 - Resolved

Failure to locate and provide protective curbing for solution tanks so that chemicals from equipment failure, spillage or accidental drainage shall not enter the water conduits, treatment or storage basins - Resolved

Water Quality Data Table Footnotes

Unregulated

Iron:

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations,

nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this contaminant for

supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health

officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you

should consult your physician about this level of sodium in the water.

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The Source Water Assessment for Sauk Village (facility # 0312790)

Susceptibility to Contamination:

The Illinois EPA has determined that the Sauk community Water Supply's source water has a low susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells.

Sauk Villages wells are properly constructed with sound integrity and proper site conditions; a hydro-geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Sauk's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to source water, the village has implemented a source water protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA that allows a reduction in monitoring. The outcome of this monitoring has saved the community considerable laboratory analysis costs.

Customer Views Welcome

If you are interested in learning more about the Treatment and Distribution of the water system, or have any questions or concerns about this report, contact the Village Hall at 708.758.3330.



SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2008



Village Hall - 21801 Torrence Ave. Billing Information and All Other Offices - 708.758.3330

Sauk Villages WaterWorks vigilantly safeguards its well water supply. This brochure is a summary of the water quality provided to its customers last year. It is a record of the hard work, by our Certified Operator's and field personnel, to bring you water that is absolutely safe.

Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.



On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2008

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Class "A" Certificate of Competency from the IEPA is the highest class given out by the IEPA to Public Water Supply Operators. A Class "C" is the first step towards the Class "A" certification. We thank them all on a job well done.
- Our personnel have been continuing the upgrading of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2008.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase the quality of the water throughout that area.
- Our meter change-out program is nearing completion with just under 60 new meters left to install, bringing the total to over 3200. These are remote read meters, which allows us to retrieve readings without the resident needing to be home.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2008 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum

Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

<u>MCLG</u> = Maximum Contaminant Level Goal, or the level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

<u>MCL</u>= Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

 \underline{AL} = Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity The "<u>Level Found</u>" column represents an <u>average</u> of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant | |
|--|------|----------------|----------------|--------------------|------------|----------------|---|--|
| Inorganic | | * Action Level | | | | | | |
| Barium (mg/l) | 2 | 2 | 0.0553 | 0.0514 - 0.0553 | N | 10/24/2008 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 0.654 | 0 exceeding AL | N | 09/04/2008 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 15.5 | 0 exceeding AL | Y | 09/04/2008 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4 | 4 | 1.19 | 0.99 – 1.19 | N | 10/24/2008 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | N | 07/08/2008 | Erosion of natural deposits; run-off from fertilizer use; | |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | N | 07/08/2008 | leaching from septic tanks, sewage. | |
| Selenium (ug/l) | 50 | 50 | ND | NA | N | 10/24/2008 | Discharge from petroleum and metal refineries; erosion of natural deposits. | |
| Total Trihalomethanes TTHMs (ug/l) | NA | 80 | ND | NA | N | 07/22/2008 | By-product of drinking water | |
| Total Haloacetic Acids HAAS (ug/l) | NA | 60 | 1.49 | NA | N | 07/22/2008 | By-product of drinking water chlorination. | |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 3.5 | 2.4 – 3.5 | N | 07/08/2008 | Erosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 3.5 | 3.1 – 3.5 | N | 07/08/2008 | Erosion of natural deposits | |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violations | Date of Sample | Sources of Contaminants |
|---------------------------------|------|------|----------------|------------------------|------------|-------------------|--|
| Iron (ug/l) | NA | 1000 | 141 | NA | N | 10/24/2008 | Erosion from naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 42.0 | 31.1 – 42.0 | N | 10/24/2008 | Erosion of naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 113 | 71.1 - 113 | N | 10/24/2008 | Erosion of naturally occurring deposits; used as water softener. |

| Microbial Contaminants | MCLG | MCL | Highest No. of Positive | Violation | Source of Contamination |
|-------------------------------|------|-----|--------------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 1 | 2 | Y | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by dead line)

Violations for Sauk Village Public Water Supply

Violations Table

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type Violation Begin Violation End Violation Explanation

MCL (TCR), MONTHLY 11/01/2008 11/30/2008 Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.

Coliform bacteria is in itself NOT a health risk. It is an indicator that other bacteria may be present and additional testing may be required.

The EPA standard states that we are allowed one positive coliform sample per month, we had two positives in November 2008.

<u>These positive samples were both isolated to the same sample tap and not the water system as a whole</u>. The sample tap was flushed and subsequent samples were negative for the coliform bacteria. As careful as our sample collectors are there is, although minimal, always room for error in the collection process.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or

federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in

drinking water, and whether future regulation is warranted.

Iron: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this

contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for this

contaminant for supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to

consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your physician about this level of sodium in the water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant,</u> such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of
 industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff
 and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

The Source Water Assessment for Sauk Village (facility # 0312790)

Susceptibility to Contamination:

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Sauk Villages wells are properly constructed with sound integrity and proper site conditions; a hydro-geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Sauk's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to source water, the village has implemented a source water protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA that allows a reduction in monitoring. The outcome of this monitoring has saved the community considerable

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(** proper identification is required, certain restrictions apply)



SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2007



Village Hall - 21701 Torrence Ave. Billing Information and All Other Offices - 708.758.3330

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Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.



On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2007

- We have two Class "A" and one Class "C" Certified Operators who continue their education to keep them up to date with the ever changing rules and technology in the water industry, to provide the public with safe water.
- Class "A" Certificate of Competency from the IEPA is the highest class given out by the IEPA to Public Water Supply Operators. A Class "C" is the first step towards the Class "A" certification. We thank them all on a job well done.
- Our personnel have been continuing the upgrading of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and sections of water main that are deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2007.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase the quality of the water throughout that area.
- Our meter change-out program is nearing completion with just under 100 new meters left to install, bringing the total to over 3200. These are remote read meters, which allows us to retrieve readings without the resident needing to be home.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2007 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum

Contaminant Level Goal (MCLG), and sources of contaminants. Some of the following abbreviations are used throughout this report and are defined as follows:

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<u>MCL</u>= Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology.

 \underline{AL} = Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>ND</u> = not detectable at testing limits, <u>NA</u> = not applicable, <u>mg/l</u> = milligrams per liter, or <u>parts per million</u> (or one ounce in 7,350 gallons of water), <u>ug/l</u> = micrograms per liter, or <u>parts per billion</u> (or one ounce in 7,350,000 gallons of water), <u>pCi/l</u> = picocuries per liter, used to measure radioactivity The "<u>Level Found</u>" column represents an <u>average</u> of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant | |
|--|------|----------------|----------------|--------------------|------------|----------------|---|--|
| Inorganic | | * Action Level | | | | | | |
| Barium (mg/l) | 2 | 2 | 0.0558 | 0.0519 - 0.0558 | None | 10/04/2005 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 0.407 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 8.1 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4 | 4 | 0.73 | 0.63 - 0.73 | None | 10/04/2005 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Nitrate (as N) (mg/l) | 10 | 10 | ND | NA | None | 07/12/2007 | Erosion of natural deposits; run-off from fertilizer use; | |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | None | 10/23/2007 | leaching from septic tanks, sewage. | |
| Selenium (ug/l) | 50 | 50 | 1.4 | NA | None | 10/04/2005 | Discharge from petroleum and metal refineries; erosion of natural deposits. | |
| Total Trihalomethanes TTHMs (ug/l) | NA | 80 | ND | NA | None | 07/13/2007 | By-product of drinking water | |
| Total Haloacetic Acids HAAS (ug/l) | NA | 60 | 1.36 | NA | None | 07/27/2007 | By-product of drinking water chlorination. | |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 7.2 | 0 - 7.2 | None | 08/09/2005 | Erosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 4.2 | 2.45 - 4.2 | None | 08/09/2005 | Erosion of natural deposits | |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violations | Date of Sample | Sources of Contaminants |
|---------------------------------|------|------|----------------|------------------------|------------|-------------------|--|
| Iron (ug/l) | NA | 1000 | 152 | 91.6 - 152 | None | 10/04/2005 | Erosion from naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 34.2 | NA | None | 10/04/2005 | Erosion of naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 106 | 81 - 106 | None | 10/04/2005 | Erosion of naturally occurring deposits; used as water softener. |

| Microbial Contaminants | MCLG | MCL | Highest No. of Positive | Violation | Source of Contamination |
|-------------------------------|------|-----|--------------------------------|-----------|--------------------------------------|
| Total Coliform | 0 | 0 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by dead line)

Violations for Sauk Village Public Water Supply

No drinking water quality violations were recorded for our facility during the year 2007.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either state or

federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated contaminants in

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consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your physician about this level of sodium in the water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

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Contaminants that may be present in source water include:

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- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban storm-water runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of
 industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff
 and septic systems;
- <u>Radioactive contaminants</u>, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Sauk's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to source water, the village has implemented a source water protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA that allows a reduction in monitoring. The outcome of this monitoring has saved the community considerable laboratory analysis costs.

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SAUK VILLAGE WATERWORKS WATER QUALITY REPORT FOR 2006

Village Hall - 21701 Torrence Ave. Billing Information and All Other Offices - 708.758.3330

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Included are details about where your water comes from, what it contains, and how it compares to the standards set by the regulatory agencies. Sauk Village WaterWorks is committed to providing you with information about your water supply, because customers who are informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

On tap at the Sauk Village WaterWorks Distribution and Water Treatment improvements in 2006

- Two of our Certified Operators have continued their education and achieved their Class "A" Certificates of Competency from the IEPA. This is the highest class given out by the IEPA to Public Water Supply Operators. We congratulate them on a job well done.
- Our personnel have been continuing the upgrading of our distribution system infrastructure with the replacement of fire hydrants, water main valves, and even sections of water main that were deteriorating beyond repair.
- o Replacement and repair of residential shut off valves continued throughout 2006.
- We are continuing to flush key locations every week, weather permitting, on the south side of town, which has proven to increase the quality of the water throughout that area.
- Our meter change-out program is nearing completion with just over 100 new meters left to install, bringing the total to over 3200. These are remote read meters, which allows us to retrieve readings without the resident needing to be home.

Sources of Sauk Village's Drinking Water comes from three groundwater wells, two wells located at 2217 220th St. and one at 2050 Evergreen. They are drilled approximately 500' deep into the sandstone layer of the earth. This is water that is trapped within the sandstone and forms the water table. Groundwater is less likely to become contaminated than surface water, but is still mandated to be tested for chemical constitutes as outlined by the Illinois EPA and the USEPA.

2006 Water Quality Data

The tables listed below show the contaminant, Maximum Contaminant Level (MCL), Maximum Contaminant Level Goal (MCLG), and sources of contaminants. Some of the

following abbreviations are used throughout this report and are defined as follows:

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<u>AL</u>= Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

 $\underline{\mathbf{ND}}$ = not detectable at testing limits, $\underline{\mathbf{NA}}$ = not applicable, $\underline{\mathbf{mg/l}}$ = milligrams per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{m}}$ illion (or one ounce in 7,350 gallons of water), $\underline{\mathbf{ug/l}}$ = micrograms per liter, or $\underline{\mathbf{p}}$ arts $\underline{\mathbf{p}}$ er $\underline{\mathbf{b}}$ illion (or one ounce in 7,350,000 gallons of water), $\underline{\mathbf{pCi/l}}$ = picocuries per liter, used to measure radioactivity

The "Level Found" column represents an average of sample result data collected.

The "Range of Detections" column represents a range of individual sample results.

The "<u>Date of Sample</u>" column. If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change.

| Contaminant | MCLG | MCL | Level Found | Range of Detection | Violations | Date of Sample | Sources of Contaminant | |
|--|------|----------------|----------------|--------------------|------------|----------------|---|--|
| Inorganic | | * Action Level | | | | | | |
| Barium (mg/l) | 2 | 2 | 0.0558 | 0.0519 - 0.0558 | None | 10/04/2005 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. | |
| Copper (mg/l) | 1.3 | * AL=1.3 | 0.407 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Lead (ug/l) | 0 | * AL=15 | 8.1 | 0 exceeding AL | None | 09/08/2005 | Corrosion of household plumbing systems; erosion of natural deposits. | |
| Fluoride (mg/l) | 4 | 4 | 0.73 | 0.63 - 0.73 | None | 10/04/2005 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. | |
| Nitrate (as N) (mg/l) | 10 | 10 | 0.21 | 0.14 – 0.21 | None | 07/25/2006 | Erosion of natural deposits; run-off from fertilizer use; | |
| Nitrite (asN) (mg/l) | 10 | 10 | ND | NA | None | 07/25/2006 | leaching from septic tanks, sewage. | |
| Selenium (ug/l) | 50 | 50 | 1.4 | NA | None | 10/04/2005 | Discharge from petroleum and metal refineries; erosion of natural deposits. | |
| Total Trihalomethanes TTHMs (ug/l) | NA | 80 | ND | NA | None | 06/20/2006 | By product of dripking water | |
| Total Haloacetic Acids HAAS (ug/l) | NA | 60 | ND | NA | None | 06/20/2006 | By-product of drinking water chlorination. | |
| Radioactive Alpha Emitters (pCi/l) | 0 | 15 | 7.2 | 0 - 7.2 | None | 08/09/2005 | Erosion of natural deposits | |
| Combined Radium (pCi/l) | 0 | 5 | 4.2 | 2.45 - 4.2 | None | 08/09/2005 | Erosion of natural deposits | |

| State Regulated Contaminants | MCLG | MCL | Level Found | Range of Detections | Violations | Date of Sample | Sources of Contaminants |
|---------------------------------|------|------|----------------|------------------------|------------|-------------------|--|
| Iron (ug/l) | NA | 1000 | 152 | 91.6 - 152 | None | 10/04/2005 | Erosion from naturally occurring deposits. |
| Manganese (ug/l) | NA | 150 | 34.2 | NA | None | 10/04/2005 | Erosion of naturally occurring deposits. |
| Sodium (mg/l) | NA | NA | 106 | 81 - 106 | None | 10/04/2005 | Erosion of naturally occurring deposits; used as water softener. |

| Contamination | MCLG | MCL | Highest No. of Posi | tive Violat | non Source of |
|------------------------------|------|-----|---------------------|-------------|--------------------------------------|
| Total Coliform | 0 | 0 | 0 | No | Naturally present in the environment |
| Fecal Coliform and E-Coli | 0 | 0 | 0 | No | |

Violation Types

MNR Monitoring Violation (failure to Monitor)

MCL Maximum Contaminant Level (level found exceeded regulated standard)

TTV Treatment Technique Violation (failure to meet treatment process)

RPV Reporting Violation (failure to submit results/required report by dead line)

Violations for Sauk Village Public Water Supply

No drinking water quality violations were recorded for our facility during the year 2006.

Water Quality Data Table Footnotes

Unregulated

Contaminants: A maximum contaminant level (MCL) for this contaminant has not been established by either

state or federal regulations, nor has mandatory health effects language. The purpose for

monitoring this contaminant is to assist the USEPA in determining the occurrence of unregulated

contaminants in drinking water, and whether future regulation is warranted.

<u>Iron:</u> This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for

this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by the USEPA. However, the state has set a MCL for

this contaminant for supplies serving a population of 1000 or more.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to

consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult your physician about this level of

sodium in the water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hot Line (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs,

springs, and groundwater wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminant</u>, such as salts and metals, which can be naturally occurring or the result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff and septic systems;
- <u>Radioactive contaminants</u>, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hot Line (1-800-426-4791).

The Source Water Assessment for Sauk Village (facility # 0312790)

Susceptibility to Contamination:

The Illinois EPA has determined that the Sauk community Water Supply's source water has a low susceptibility to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data on the wells

Sauk Villages wells are properly constructed with sound integrity and proper site conditions; a hydro-geologic barrier exists which prevents pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Sauk's wells. The Illinois EPA regulates these minimum protection zones. To further reduce the risk to source water, the village has implemented a source water protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA that allows a reduction in monitoring. The outcome of this monitoring has saved the community considerable laboratory analysis costs.

Customer Views Welcome

If you are interested in learning more about the Treatment and Distribution of the water system, or have any questions or concerns about this report, contact; Joseph Vesper Sr., Foreman of the Water Works, through the Village Hall at 708.758.3330. Individual or group tours are also available between the hours of 9:00 am and 2:00 PM Monday through Friday. **

(** proper identification is required, certain restrictions apply)